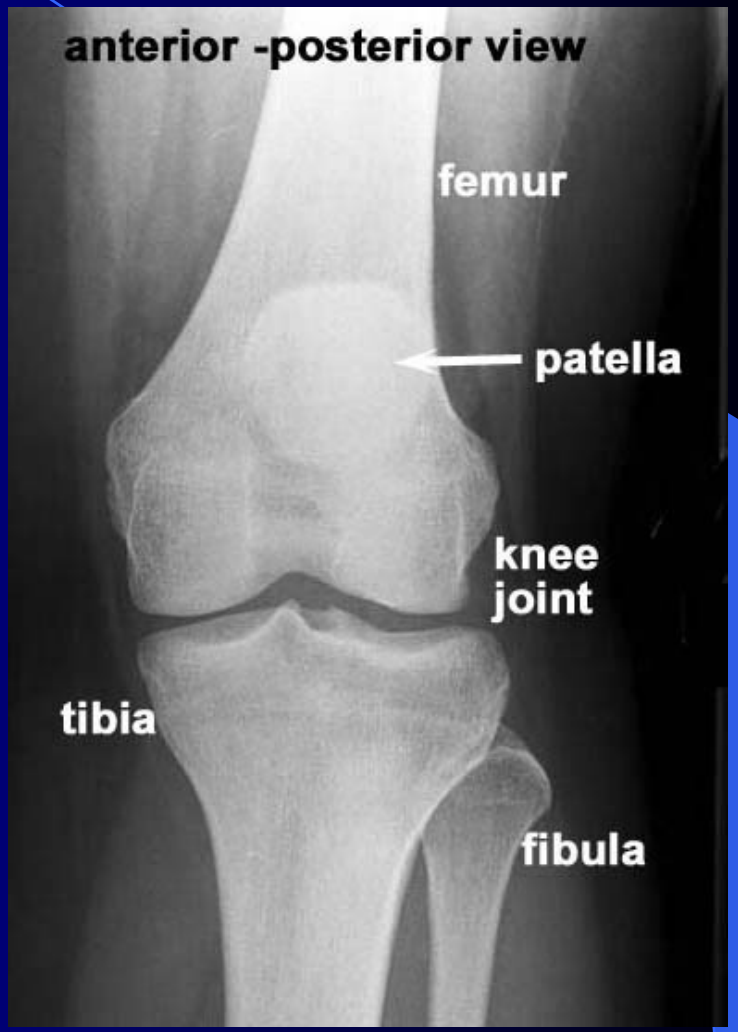
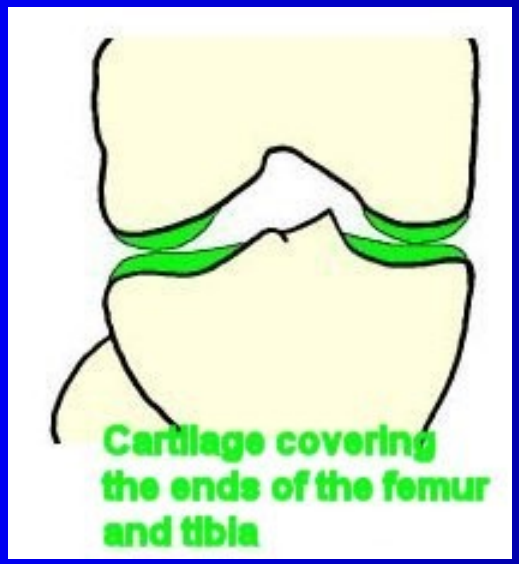
What is a Joint?

A joint is the point where 2 or more bones are connected.

This is an x-ray of a normal knee joint.

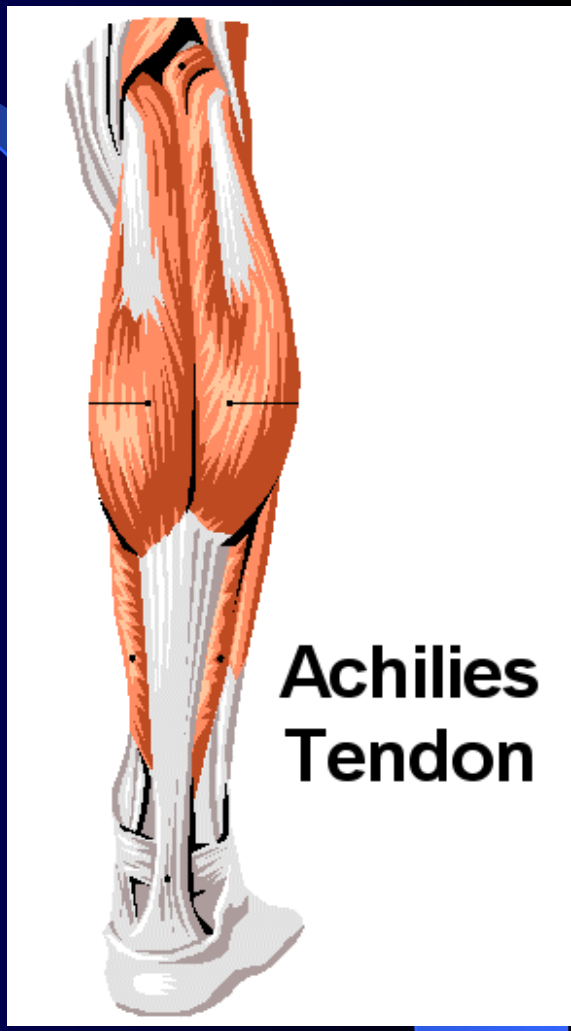


Parts of a Joint



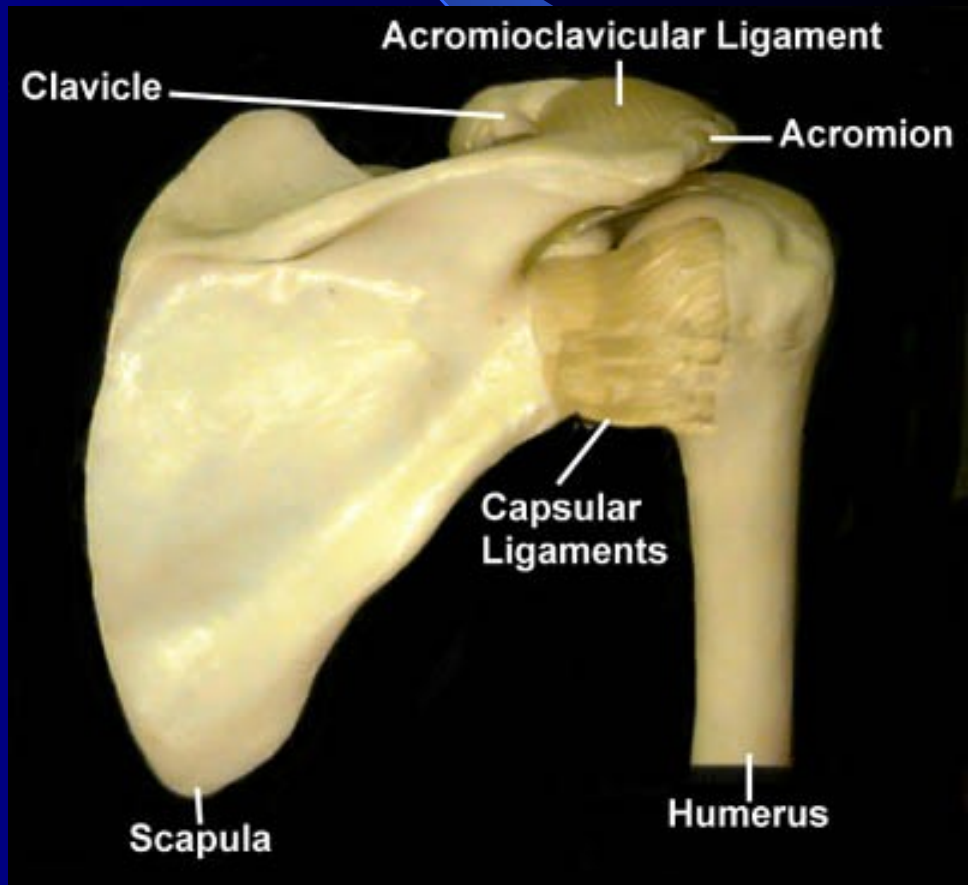
Tendons are the tough cords of tissue that connect muscle to bone.

Cartilage is the padding between the bones that deep them



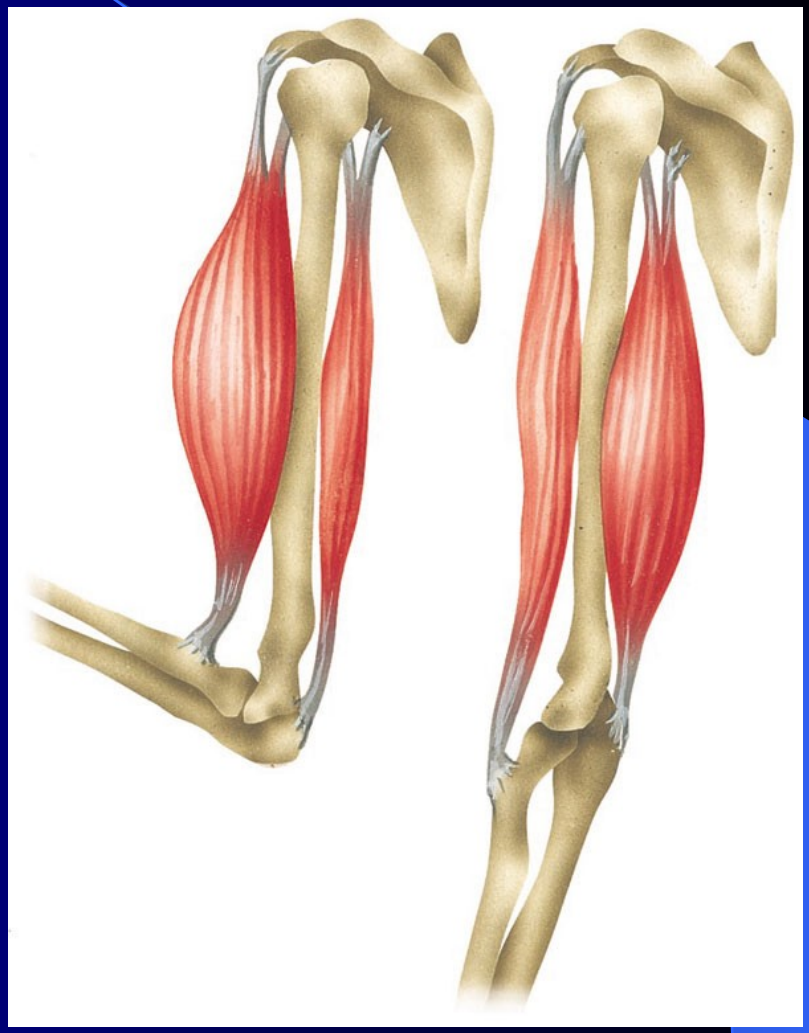
Ligaments Tendons Cartilage

Ligaments are the strong, elastic bands of tissue that connect bones to bones.



Muscles

Muscles are not technically part of a joint. But they are very important because strong muscles help support and protect joints.



How to Prevent Joint Problems

- Before exercising or playing sports, warm up. Warm up by walking or riding a stationary bicycle. Then do stretches. Stretching helps reduce tension on tendons and relieve pressure on the joints during activity.

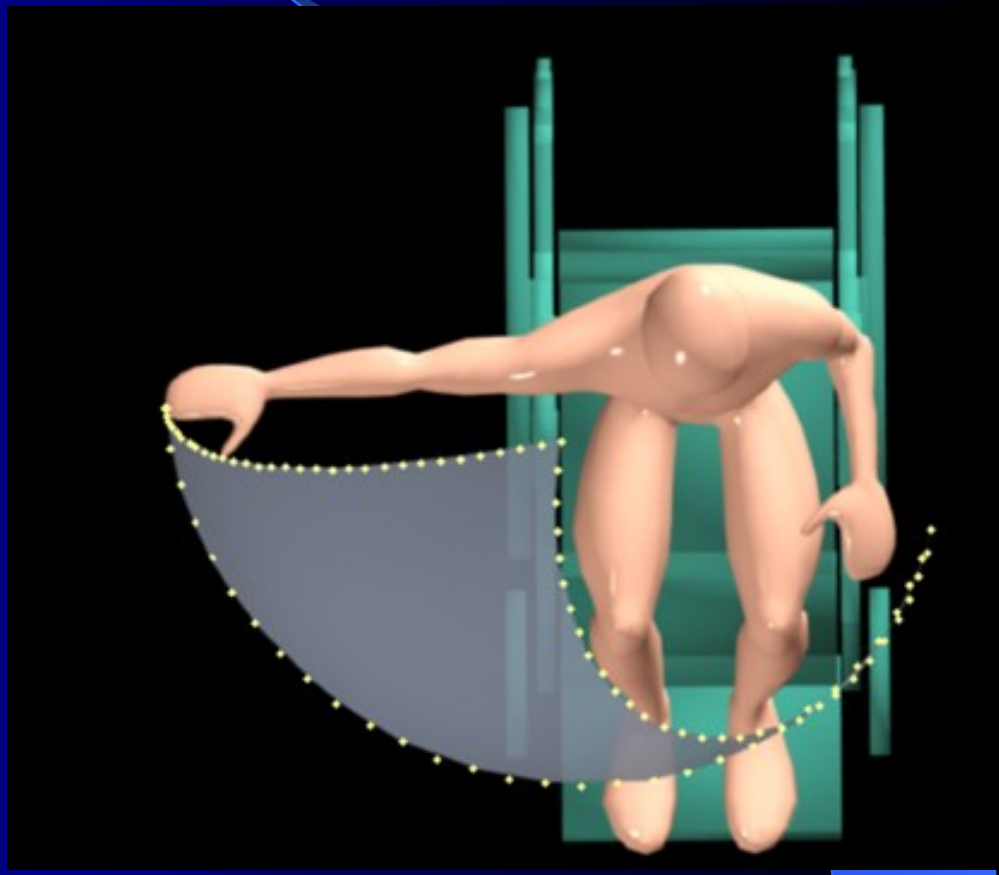
- Strengthen leg and arm muscles by doing specific exercises. A supervised workout with weights is a great way to strengthen muscles that support joints.

- Avoid sudden changes in intensity of exercise. Increase the force or duration of activity gradually.
- Wear shoes that fit properly.
- Wear shoes that are in good condition.
- Maintain a healthy weight to reduce stress on the knees, hips, and back.

- If you are prone to knee problems, people can often reduce some of the stress on the knees by wearing special shoe inserts called “orthotics” to help with flat feet or feet that roll inw

Range of Motion

Range of motion exercises help maintain normal joint movement and relieve stiffness. This type of exercise helps maintain or increase flexibility.

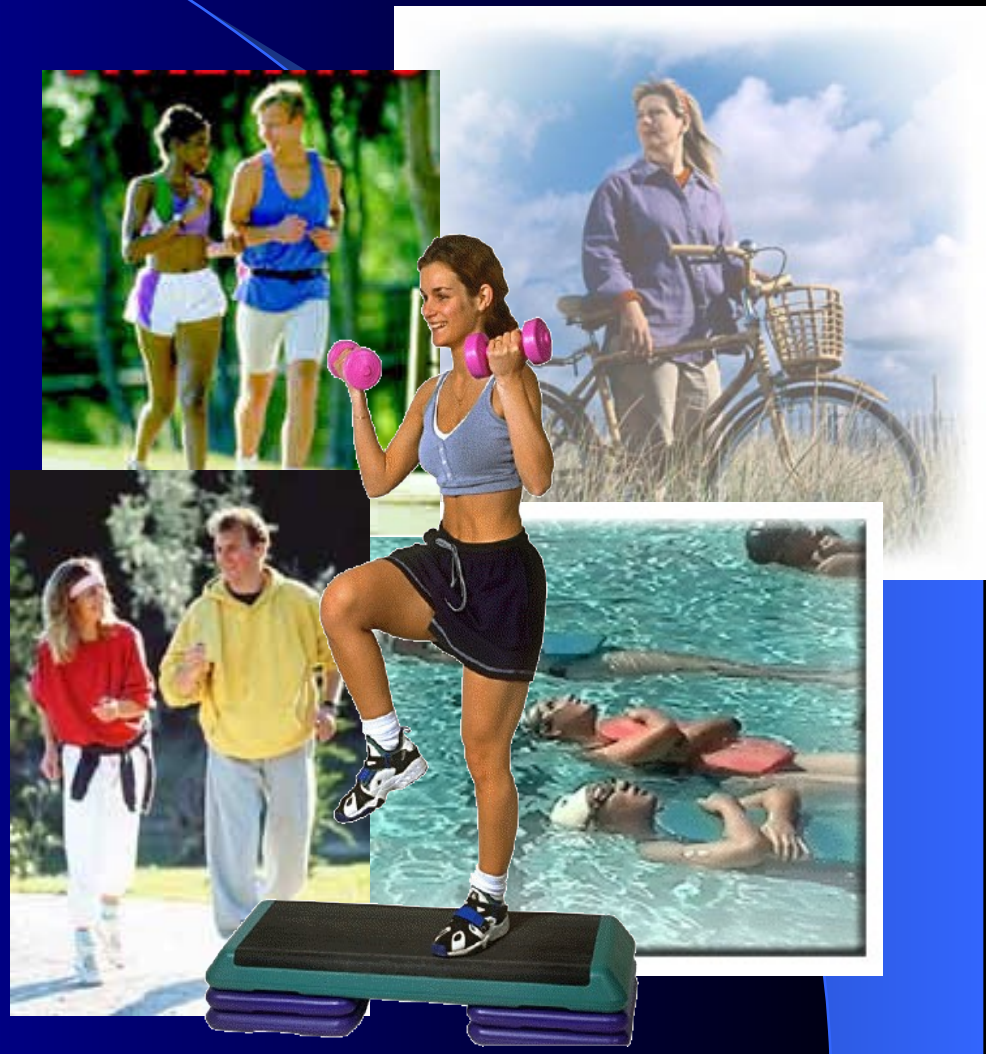


Strengthening

Strengthening exercises help keep or increase muscle strength. Strong muscles help support and protect joints.

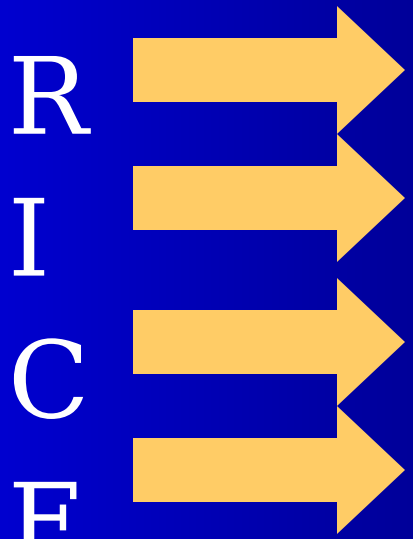
Aerobic or Endurance Exercises

These exercises improve function of the heart and circulation. They also help control weight. Extra body weight puts pressure on many joints. Some studies also show that aerobic exercise can reduce inflammation in some joints.



First Aid for Joint Injuries

Remember RICE



R REST

I ICE

C COMPRESSION

E ELEVATION

R → Rest.

Reduce or stop using the injured

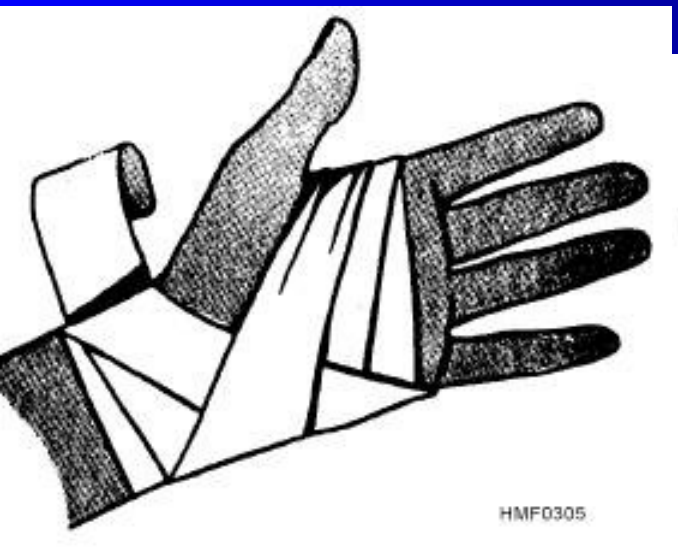
joint for at least 48 hours.

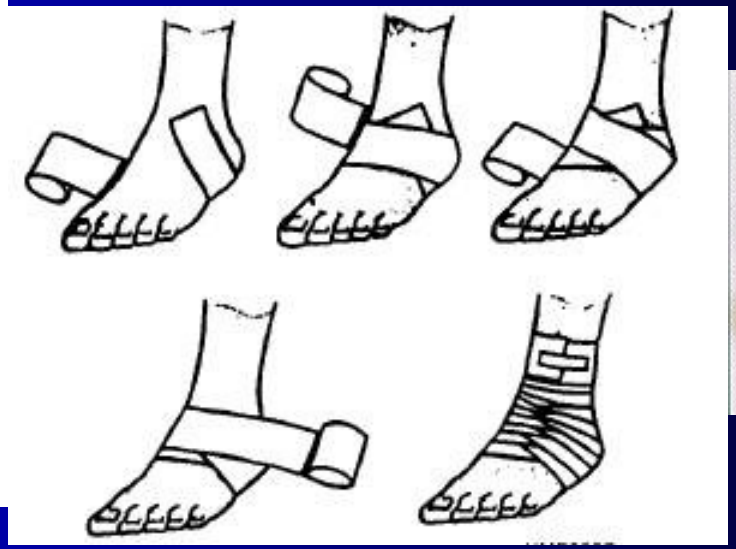
I → Ice.

Put an ice pack on the injured area for 20 minutes at a time. Do this 4-8 times a day. Use a cold pack, ice bag, a plastic bag filled with crushed ice, or even a bag of frozen vegetables. Be sure your cold pack or ice bag is wrapped in a towel.

C → Compression.

Compression helps reduce the swelling. Compress the area with a an elastic wrap or “Ace bandage” to help stabilize the joint.





E → Elevation.

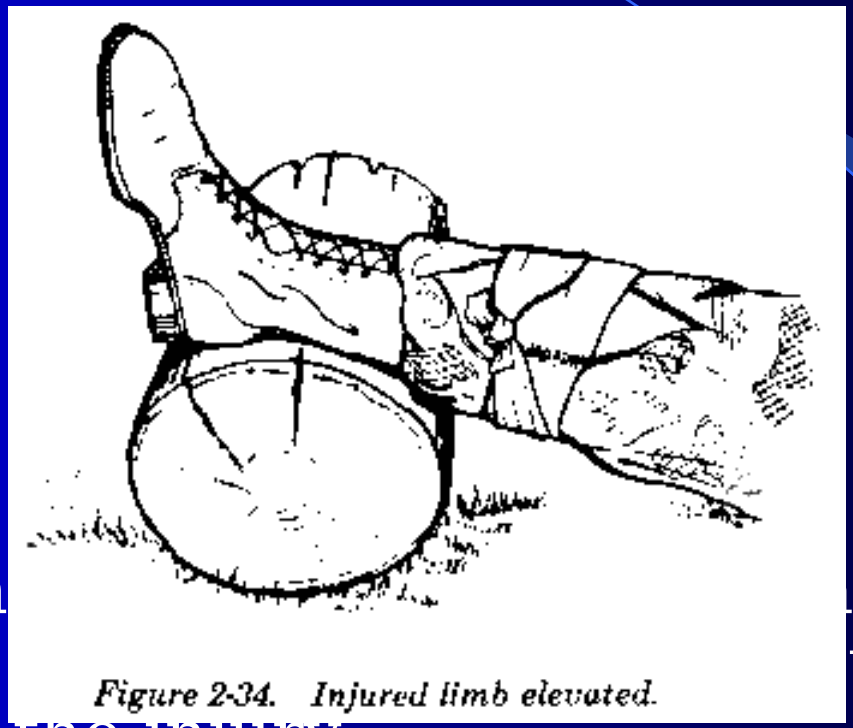


Figure 2-34. Injured limb elevated.

- Keep th bove the level of to help elevate the injury.

Remember

When your doctor prescribes medications like Tylenol ™ or Motrin ™ for joint injuries it is important to take them **exactly as directed**.

These medications work **OVER TIME** to reduce swelling as well as pain, **so take them as prescribed**!!

Got Questions?

- Talk to your family doctor.
- Talk to your physical therapist.
- Call the Health Care Information Line (HCIL) at 1-800-720-6946.
- Log on to the National Institutes of Health NIAMS web site at www.nih.gov/niams/healthinfo.